Colorado Lightning Mapping Array Collaborations through the GOES-R Visiting Scientist Program

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For the past two years, the GOES-R Proving Ground has solicited proposals for its Visiting Scientist Program. NASA's Short-term Prediction Research and Transition (SPoRT) Center has used this opportunity to support the GOES-R Proving Ground by expanding SPoRT's total lightning collaborations. In 2012, this expanded the evaluation of SPoRT's pseudo-geostationary lightning mapper product to the Aviation Weather Center and Storm Prediction Center. This year, SPoRT has collaborated with the Colorado Lightning Mapping Array (COLMA) and potential end users. In particular, SPoRT is collaborating with the Cooperative Institute for Research in the Atmosphere (CIRA) and Colorado State University (CSU) to obtain these data in real-time. From there, SPoRT is supporting the transition of these data to the local forecast offices in Boulder, Colorado and Cheyenne, Wyoming as well as to Proving Ground projects (e.g., the Hazardous Weather Testbed's Spring Program and Aviation Weather Center's Summer Experiment).

This presentation will focus on the results of this particular Visiting Scientist Program trip. In particular, the COLMA data are being provided to both forecast offices for initial familiarization. Additionally, several forecast issues have been highlighted as important uses for COLMA data in the operational environment. These include the utility of these data for fire weather situations, situational awareness for both severe weather and lightning safety, and formal evaluations to take place in the spring of 2014.